

Abstract of the Disclosure

A high-pressure treatment apparatus comprises a first solid reservoir, a second solid reservoir connected to the first solid reservoir through a first connecting pipe, a
5 high-pressure reactor connected to the second solid reservoir through a second connecting pipe, means for feeding reaction medium into the high-pressure reactor, a first sealing unit and a second sealing unit intervened respectively in the first connecting pipe and second connecting pipe, a first
10 fluid feed unit for feeding a first fluid between the first sealing unit and the second sealing unit, a second fluid feed unit for feeding a second fluid between the second sealing unit and the high-pressure reactor, and means for opening the second sealing unit at the time of shut-off of the first
15 sealing unit and controlling the first fluid and the second fluid to form a pressure-gradient so that pressure between the first sealing unit and the second sealing unit and pressure between the second sealing unit and the high-pressure reactor decrease gradually toward the high-pressure
20 reactor.